

PFA AIRWORTHINESS INFORMATION



MANDATORY CHANGE TO PRECISION PROPELLERS TO REPLACE ALUMINIUM PITCH BLOCKS BY MOULDED PLASTIC PITCH BLOCKS

Applicability:

All aircraft fitted with propellers manufactured by 'Precision Propellers' which are operated on Permits to Fly issued on PFA recommendation. These propellers are standard fit on CFM Streak Shadow, Star Streak and amateur-built Shadow D series aircraft.

Compliance by: Five flying hours from date of issue of this bulletin, or next permit renewal, whichever is sooner.

Background:

For many years, Precision Propellers supplied propellers with moulded plastic pitch blocks to retain the blades within the hubs and allow the blade pitch to be adjusted. For a short period they supplied alternative machined aluminium alloy pitch blocks. A number of incidents have occurred where the forward hub plate has cracked on propellers fitted with the aluminium pitch blocks. Precision Propellers has therefore reverted to the moulded plastic pitch blocks and no longer recommend use of the aluminium pitch blocks.

Actions required:

1. Examine the pitch blocks which retain the propeller blade roots between the front and rear hub plates. If the pitch blocks are of moulded plastic construction, make an entry in the airframe and engine logbooks stating that the aircraft complies with this bulletin, and that moulded plastic pitch blocks were found fitted.
2. If the pitch blocks are of aluminium construction, carry out an engine ground run and record max static engine rpm. Remove the propeller from the aircraft, measure the propeller blade pitch using the Precision Propellers pitch gauge (or equivalent) and record blade pitch figure, record position of each blade in the hub plates. Dismantle the propeller and discard the aluminium pitch blocks. Obtain replacement moulded plastic pitch blocks from Precision Propellers (tel. 001 480 6715992)
3. Reassemble propeller with moulded plastic pitch blocks, replacing each blade in same location as previously in relation to front and back plates. Set blade pitch as previously, torque clamping bolts to specified torque using a torque wrench and balance propeller in accordance with Precision Propellers assembly instructions.
4. Reassemble propeller to aircraft in accordance with Rotax engine installation instructions.
5. PFA inspector to check assembly of propeller and assembly of propeller to aircraft in accordance with instructions, and carry out engine ground run to check max static engine rpm are within +/- 50 RPM of previously recorded figure and freedom from excessive vibration.

Inspection Requirements:

Work carried out must be checked by a suitably approved PFA inspector prior to next flight. Airframe logbook entry to be raised and signed by the inspector confirming compliance with PFA airworthiness information MOD/206/004.